

PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,446

DATE: 10/29/2001

TIME: 11:24:00

Input Set : A:\seqed.app.txt

Output Set: N:\CRF3\10292001\I830446.raw

Does Not Comply**Corrected Diskette Needed**

3 <110> APPLICANT: MURDIN, Andrew D.; OOMEN, Raymond P; and WANG, Joe
 5 <120> TITLE OF INVENTION: Chlamydia antigens and corresponding DNA fragments and uses
 thereof
 7 <130> FILE REFERENCE: 77813-51
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/830,446
 C--> 10 <141> CURRENT FILING DATE: 2001-09-21
 12 <150> PRIOR APPLICATION NUMBER: US 60/106034
 13 <151> PRIOR FILING DATE: 1998-10-28
 14 <150> PRIOR APPLICATION NUMBER: US 60/106039
 15 <151> PRIOR FILING DATE: 1998-10-28
 16 <150> PRIOR APPLICATION NUMBER: US 60/10604
 17 <151> PRIOR FILING DATE: 1998-10-28
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 29 <151> PRIOR FILING DATE: 1998-11-02
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 33 <151> PRIOR FILING DATE: 1998-11-02
 34 <150> PRIOR APPLICATION NUMBER: US 60/107034
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 36 <150> PRIOR APPLICATION NUMBER: US 60/107035
 37 <151> PRIOR FILING DATE: 1998-11-02
 39 <160> NUMBER OF SEQ ID NOS: 45
 41 <170> SOFTWARE: PatentIn Ver. 2.0

ERRORED SEQUENCES

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 3351 <212> TYPE: PRT
 3352 <213> ORGANISM: Chlamydia pneumoniae
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 3359 15 20 25
 3361 Ile Asn Glu Gly Gln Thr Leu Ala Ile Ile Gly Glu Ser Gly Ser Gly

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3368 60          65          70          75
3370 Ala Ser Arg Ser Ile Gln Lys Lys Ile Ile Gly Thr Glu Ile Ser Met
3371          80          85          90
3373 Ile Phe Gln Asn Pro Gln Ala Ser Leu Asn Pro Val Phe Thr Ile Glu
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3376 Gln Gln Phe Arg Glu Ile Ile His Thr His Leu Ala Leu Thr Ala Glu
3377          110          115          120
3379 Val Ala Lys Glu Lys Met Leu Tyr Ala Leu Glu Glu Thr Gly Phe His
3380          125          130          135
3382 Asp Pro Arg Leu Cys Leu Asn Leu Tyr Pro His Gln Leu Ser Gly Gly
3383 140          145          150          155
3385 Met Leu Gln Arg Ile Cys Ile Ala Met Ala Leu Leu Cys Ser Pro Lys
3386          160          165          170
3388 Leu Leu Ile Ala Asp Glu Pro Thr Thr Ala Leu Asp Val Ser Val Gln
3389          175          180          185
3391 Tyr Gln Ile Leu Gln Leu Leu Lys Thr Leu Gln Lys Lys Thr Gly Met
3392          190          195          200
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3395          205          210          215
3397 Asp Asp Val Leu Val Leu Tyr Ala Gly Arg Met Val Glu Cys Ala Pro
3398 220          225          230          235
3400 Ala Val Gln Met Phe His Asn Pro Ser His Pro Tyr Thr Arg Asp Leu
3401          240          245          250
3403 Leu Ala Ser Arg Pro Ser Leu Gln Pro Gln Gln Leu Gly Ser Phe Asn
3404          255          260          265
3406 Pro Ile Pro Gly Gln Pro Pro His Tyr Thr Ala Phe Pro Ser Gly Cys
3407          270          275          280
3409 Arg Tyr His Pro Arg Cys Ser Lys Ile Leu Asn Arg Cys Ser Ala Glu
3410          285          290          295
3412 Ala Pro Glu Ile Tyr Pro Val Arg Glu Gly His Lys Val Arg Val Gly
3413 300          305          310          315
3415 Cys Met Thr Thr Asn Phe Pro Gln Pro Leu Ile Gln Ala Thr Ser Leu
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3428 380          385          390          395
3430 Asn Gly Thr Pro Ile Lys Leu His Ser Lys His Gly Arg His Gln Leu
3431          400          405          410
3433 Arg Ser Gln Val Arg Leu Val Phe Gln Asn Pro Gln Ala Ser Leu Asn
3434          415          420          425

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3440           445           450           455
3442 Glu Leu Val Gly Leu Ser Glu Glu Tyr Phe Tyr Arg Tyr Pro His Gln
3443 460           465           470           475
3445 Leu Ser Gly Gly Gln Gln Gln Arg Val Ser Ile Ala Arg Ala Leu Leu
3446           480           485           490
3448 Gly Val Pro Gln Leu Ile Ile Cys Asp Glu Ile Val Ser Ala Leu Asp
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3451 Leu Ser Ile Gln Ala Gln Ile Leu Asn Met Leu Ala Glu Leu Gln Lys
3452           510           515           520
3454 Lys Leu Ser Leu Thr Tyr Leu Phe Ile Ser His Asp Leu Ala Val Val
3455           525           530           535
3457 Arg Ser Phe Cys Thr Glu Val Phe Ile Met Tyr Lys Gly Gln Ile Val
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4750 <210> SEQ ID NO: 45
4751 <211> LENGTH: 813
4752 <212> TYPE: PRT
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4760           15           20           25
4762 Gly Ser Ala Ile Ser Ser Ser Pro Thr Ala Val Val Lys Phe Ile Asn
4763           30           35           40
4765 Asn Thr Ala Thr Met Ser Phe Ser His Asn Phe Thr Ser Ser Gly Gly
4766           45           50           55
4768 Gly Val Ile Tyr Gly Gly Ser Ser Leu Leu Phe Glu Asn Asn Ser Gly
4769 60           65           70           75
4771 Cys Ile Ile Phe Thr Ala Asn Ser Cys Val Asn Ser Leu Lys Gly Val
4772           80           85           90
4774 Thr Pro Ser Ser Gly Thr Tyr Ala Leu Gly Ser Gly Gly Ala Ile Cys
4775           95           100          105
4777 Ile Pro Thr Gly Thr Phe Glu Leu Lys Asn Asn Gln Gly Lys Cys Thr
4778           110          115          120
4780 Phe Ser Tyr Asn Gly Thr Pro Asn Asp Ala Gly Ala Ile Tyr Ala Glu
4781           125          130          135
4783 Thr Cys Asn Ile Val Gly Asn Gln Gly Ala Leu Leu Leu Asp Ser Asn
4784 140          145          150          155
4786 Thr Ala Ala Arg Asn Gly Gly Ala Ile Cys Ala Lys Val Leu Asn Ile
4787           160          165          170
4789 Gln Gly Arg Gly Pro Ile Glu Phe Ser Arg Asn Arg Ala Glu Lys Gly

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4792 Gly Ala Ile Phe Ile Gly Pro Ser Val Gly Asp Pro Ala Lys Gln Thr
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4796          205          210          215
4798 Asn Met Leu Asn Thr Lys Pro Gly Ile Arg Asn Ala Ile Thr Val Glu
4799 220          225          230          235
4801 Ala Gly Gly Glu Ile Val Ser Leu Ser Ala Gln Gly Gly Ser Arg Leu
4802          240          245          250
4804 Val Phe Tyr Asp Pro Ile Thr His Ser Leu Pro Thr Thr Ser Pro Ser
4805          255          260          265
4807 Asn Lys Asp Ile Thr Ile Asn Ala Asn Gly Ala Ser Gly Ser Val Val
4808          270          275          280
4810 Phe Thr Ser Lys Gly Leu Ser Ser Thr Glu Leu Leu Leu Pro Ala Asn
4811          285          290          295
4813 Thr Thr Thr Ile Leu Leu Gly Thr Val Lys Ile Ala Ser Gly Glu Leu
4814 300          305          310          315
4816 Lys Ile Thr Asp Asn Ala Val Val Asn Val Ala Gly Phe Ala Thr Gln
4817          320          325          330
4819 Gly Ser Gly Gln Leu Thr Leu Gly Ser Gly Gly Thr Leu Gly Leu Ala
4820          335          340          345
4822 Thr Pro Thr Gly Ala Pro Ala Ala Val Asp Phe Thr Ile Gly Lys Leu
4823          350          355          360
4825 Ala Phe Asp Pro Phe Ser Phe Leu Lys Arg Asp Phe Val Ser Ala Ser
4826          365          370          375
4828 Val Asn Ala Gly Thr Lys Asn Val Thr Leu Thr Gly Ala Leu Val Leu
4829 380          385          390          395
4831 Asp Glu His Asp Val Thr Asp Leu Tyr Asp Met Val Ser Leu Gln Ser
4832          400          405          410
4834 Pro Val Ala Ile Pro Ile Ala Val Phe Lys Gly Ala Thr Val Thr Lys
E--> 4835          445 - change to 415 420          425
4837 Thr Gly Phe Pro Asp Gly Glu Ile Ala Thr Pro Ser His Tyr Gly Tyr
4838          430          435          440
4840 Gln Gly Lys Trp Ser Tyr Thr Trp Ser Arg Pro Leu Leu Ile Pro Ala
4841          445          450          455
4843 Pro Asp Gly Gly Phe Pro Gly Gly Pro Ser Pro Ser Ala Asn Thr Leu
4844 460          465          470          475
4846 Tyr Ala Val Trp Asn Ser Asp Thr Leu Val Arg Ser Thr Tyr Ile Leu
4847          480          485          490
4849 Asp Pro Glu Arg Tyr Gly Glu Ile Val Ser Asn Ser Leu Trp Ile Ser
4850          495          500          505
4852 Phe Leu Gly Asn Gln Ala Phe Ser Asp Ile Leu Gln Asp Val Leu Leu
4853          510          515          520
4855 Ile Asp His Pro Gly Leu Ser Ile Thr Ala Lys Ala Leu Gly Ala Tyr
4856          525          530          535
4858 Val Glu His Thr Pro Arg Gln Gly His Glu Gly Phe Ser Gly Arg Tyr
4859 540          545          550          555
4861 Gly Gly Tyr Gln Ala Ala Leu Ser Met Asn Tyr Thr Asp His Thr Thr
4862          560          565          570

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4864 Leu Gly Leu Ser Phe Gly Gln Leu Tyr Gly Lys Thr Asn Ala Asn Pro
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4867 Tyr Asp Ser Arg Cys Ser Glu Gln Met Tyr Leu Leu Ser Phe Phe Gly
4868          590          595          600
4870 Gln Phe Pro Ile Val Thr Gln Lys Ser Glu Ala Leu Ile Ser Trp Lys
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4880          655          660          665
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4883          670          675          680
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4889 700          705          710          715
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4903 Val Asp Leu Thr Glu Asp Thr Gln Ala Phe Leu Asn Tyr Thr Phe Asp
4904 780          785          790          795
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4907          800          805          810
4909 Thr Phe

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VERIFICATION SUMMARY

DATE: 10/29/2001

PATENT APPLICATION: US/09/830,446

TIME: 11:24:02

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Output Set: N:\CRF3\10292001\I830446.raw

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L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:3464 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:36

L:4835 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:45